

For the past ten years, I have had the privilege of teaching organic chemistry to numerous undergraduate students. My teaching career is more of a teaching calling, a passion and love to connect the material and beauty of the science to the students. Since I've been teaching, my mantra is **"It's all about the students!"** I do my best to encourage and challenge my students, to make my courses relevant to their interests/world, and to have students actively participate in their learning. In addition, I want my students to be well-trained in critical thinking, problem-solving ability, questioning, and extending knowledge. I desire that my students will have *the best learning experiences* as a Penn State student. In turn, they will be better-prepared and develop more quickly as deep thinkers and will connect their learning experience with their life experience. For these reasons, *I am constantly rethinking and reworking my teaching methods by paying close attention to best practices for the best interest of my students.*

An Encouraging Coach. The tone I set in all of my classes is critical to the students' impression of the course and me. Each day, I must pay attention to my attitude, delivery, and my interactions with the students. I do my best to listen to their concerns, to offer help, and to encourage them to not lose hope; I try to reach out to them and boost their confidence. It is part of *fostering a professional, positive environment in the classroom and having a lasting impact on lives.* Coaching the students throughout the semester is an extremely gratifying and fun part of teaching. I genuinely care about the success of each student and *want them to be the best students they can be and to go on to achieve their dreams with integrity.*

Challenging & Relevant Curricula. In order for my students to have worthwhile experiences, I have overhauled most of my courses' curricula. For example, the team project assignment in Chem 431W, an advanced synthetic lab, now consists of each student team proposing a complete step-by-step synthetic route to a newly isolated natural product and carrying out the first few steps of their own route. *The teams are conducting novel research.* Chem 431W students are also required to complete individual experiments that are directly taken from the labs of PSU chemistry research faculty. That way, students will be exposed to cutting-edge research and will be encouraged to engage in undergraduate research.

I am currently developing four to five new theme-based modules for Chem 213H, an honors section of organic chemistry lab. The modules will teach students basic lab techniques in specific applications. For example, the food science module (a collaboration with Dr. Joshua Lambert in PSU's Food Science Department) will have students carry out the oxidation of green tea to black tea and then separate the components of the reaction mixture with column chromatography, a common purification technique employed by synthetic organic chemists. The agricultural science module (a project suggested by Dr. Jim Tumlinson in PSU's Chemical Ecology Department) will have the students investigate the volatile organics that come from ripening fruits; most of these organics are alcohols and esters. Here, students will learn the technique of distillation. Organic chemistry crosses over into many disciplines, and it is vital for the students to see its relevance in many areas. I hope that learning lab techniques *in context* will show students the significance of organic chemistry better than traditional experiments do.

Interactive Activities. I love learning about successful, proven teaching methods, and I am very excited about the prospect of implementing such approaches into my courses. After attending a chemical education conference in 2008, I decided it was time to have students work in groups during my lecture courses; yes, even in the Forum. Group questions allow students to apply their freshly acquired knowledge, to *work with each other*, and even to form out-of-class study groups. I thoroughly enjoy watching students go through the process of working the problem, i.e. debate their answers, teach each other. Group questions also allow me to help the students as I get a chance to walk around the entire room, answer questions or inquire about how they are doing with the question. It is noteworthy that grades went up by half a letter grade in Chem 212 since implementing the group work, and students have commented favorably on this learning experience. I use group questions as part of the final grade in Chem 202, 212, and 430. I was the first lecturer to use this teaching tool in the organic chemistry lecture courses. On a similar note, I thoroughly enjoy and value my office hours as a time to get to know my students, their understanding, and their character.

Leaving a Legacy. In my opinion, teaching offers more than just helping and wanting students achieve a high level of proficiency in courses. My hope is that I can inspire them to be open-minded toward their learning for their lifetimes, to be responsible citizens of the world, to choose a career that they deeply love, and to *continue the legacy of inspiring and impacting others in a contagious manner.* It is important that my students see my dedication to their well-being as people, not just as students. I want them to care for people with compassion, to respect all people, and to effect positive change in the world.

My teaching philosophy has evolved over the years and would not be what it is today without the creative freedom that the Chemistry Department at Penn State has entrusted me. I am grateful for all of the constructive criticism and praise that students have offered and for the support from my colleagues. Fellow faculty and students have been my great teachers as I am still a student, still a learner. *I absolutely love my job.* I can't imagine doing anything else with my professional life.